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Notes on Philippine birds, 12. An undescribed subspecies of *Centropus viridis*

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The Philippine Coucal *Centropus viridis* is an abundant species, found virtually throughout the Philippine archipelago. Three subspecies are recognized at present (duPont 1971, *Philippine Birds*, Delaware Mus. Nat. Hist.), of which 2 are melanic: the large *C. v. carpenteri* Mearns of the Batanes Islands north of Luzon; and *C. v. mindorensis* (Steere) of the island of Mindoro. No geographic variation has been suggested within the 'normally' pigmented populations (adults black glossed with green except for wings, which are chestnut). DMN measured the series of *C. v. viridis* in the Delaware Museum of Natural History (DMNH), and found no significant differences in wing, tail, exposed culmen and tarsus length among samples of populations from the islands of Catanduanes, Cebu, Dinagat, Luzon, Leyte, Marinduque, Masbate, Mindanao, Negros, Panay, Polillo, Samar, Siargao, Sibuyan, Tablas and Ticao.

The small island of Fuga is one of the Babuyan group, lying in Luzon Strait between Luzon and the Batanes group. A collection of birds from Fuga recently received by the DMNH includes 5 adult specimens of *Centropus viridis*. These clearly represent an undescribed subspecies linking the nominate race with *carpenteri* of the Batanes; it may be called

Centropus viridis major subsp. nov.

Holotype. DMNH 70326, adult female, collected at 200 ft a.s.l. on Fuga Island, Babuyan group, Philippines, on 16 March 1980, by Filipino collectors for the DMNH.

Description. Similar in colour to nominate *viridis* of nearby Luzon and the Philippines in general, but wings decidedly longer, and tail, exposed culmen and tarsus all averaging significantly longer (Table 1). Similar in its large size to the melanic race *carpenteri* of the Batanes Islands to the

TABLE 1
 Measurements and statistical comparisons of *Centropus viridis*
 ($H_0: \bar{X}_{\text{Fuga}} = \bar{X}_{\text{Luzon}}$; $H_1: \bar{X}_{\text{Fuga}} / \bar{X}_{\text{Luzon}}$)

	Wing			Tail			Culmen			Tarsus		
	\bar{X}	s	n	\bar{X}	s	n	\bar{X}	s	n	\bar{X}	s	n
Fuga ♂♂	175.0	6.24	3	260.7	5.53	3	27.6	1.29	3	39.7	0.56	3
Luzon ♂♂	151.4	5.99	20	230.4	9.96	17	24.9	1.16	20	37.3	1.72	20
t_s		6.34			5.06			3.71			2.35	
P		<0.001			<0.001			<0.01			<0.05	
Fuga ♀♀	188.0	3.54	2	287.3	4.60	2	28.2	0.28	2	42.6	0.99	2
Luzon ♀♀	162.3	5.57	12	252.1	12.23	11	26.8	0.88	12	40.2	1.40	12
t_s		6.20			3.90			2.17			2.29	
P		<0.001			<0.01			≈0.05			<0.05	

north, but pigmentation like that of *viridis*. Because *major* and *carpenteri* differ in colour, measurements of *carpenteri* were not treated statistically for the table. For purposes of direct comparison, one male *carpenteri* measured wing 173, tail 269, culmen 27.5, and tarsus 38.5 mm. For 3 females, the mean measurements (range in parentheses) were wing 189 (181.5–195), tail 263.2 (246–284.5), culmen 32.2 (31.1–33.6), and tarsus 42.3 mm (41.2–43.1).

Specimens examined (all in DMNH except *carpenteri*). *C. v. viridis*: Luzon, 32; Marinduque, 12; Sibuyan, 5; Tablas, 1; Ticao, 3; Masbate, 1; Polillo, 2; Catanduanes, 5; Samar, 2; Leyte, 3; Panay, 1; Negros, 4; Cebu, 6; Dinagat, 2; Siargao, 5; Mindanao, 18. *C. v. mindorensis*: Mindoro, 10. *C. v. carpenteri* (USNM): Batanes, 4. *C. v. major*: Fuga, 5.

Remarks. The series from the large island of Luzon was broken down into 2 samples to see whether the northernmost specimens were the largest as might be expected, as these are the nearest to the range of *major*. Although no significant mensural differences were found, the northern birds averaged shorter in wing length than the southern, the reverse of what might be expected. From northern Luzon, 4 females averaged 159.9 mm (range 157.5–162) and 6 males 149.1 mm (142.5–156). From southern Luzon, 8 females averaged 163.5 mm (153–173) and 14 males 152.4 mm (143–166). In contrast, the wings of specimens from Fuga (*major*) averaged 188 mm (185.5, 190.5) for 2 females and 175 mm (170–182) for 3 males.

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